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Arrest Convictability as a Measure of Police Performance

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ARREST CONVICTABILITY AS A MEASURE OF POLICE PERFORMANCE

SUMMARY REPORT

Of the many crime control tools available to the police, the arrest--the decision to invoke the criminal process--is perhaps the most visible and the most controversial. The arrest has long been used to measure police performance, in terms of both arrest frequency and the rate at which offenses are cleared by arrest. These measures, however, have come under sharp attack, principally because they ignore arrest quality and related due process considerations.[1]

The close relationship between arrest quality and the objective of due process has been described in a Rand report:

> Within the criminal justice system, the police function is to identify and arrest suspected offenders and gather evidence for the final determination of legal innocence or guilt. A supporter of the Due Process Model would hold that, all other factors being equal, an arrest that leads to conviction is more valuable than an arrest that does not, since only in the former is legal guilt established and the criminal sanction properly applied.[2]

I. STUDY BACKGROUND

An earlier INSLAW study of police operations in the District of Columbia found that the police can be a crucial determinant of whether an arrest ends in a conviction. The study, reported in What Happens After Arrest?, analyzed 14,865 adult arrests made by the District of Columbia's Metropolitan Police Department (MPD) and presented for prosecution to the Superior Court Division of the U.S. Attorney's Office in 1974. (In the District of Columbia, the U.S. Attorney is responsible

for the prosecution of both federal and common law offenses.) The data for the study came from the Prosecutor's Management Information System (PROMIS), which has been operating in the U.S. Attorney's Office since 1971 and which records up to 250 pieces of information on each arrest from the time the arrest is presented to the prosecutor until it reaches a formal disposition. A focal point of the analysis was the impact on arrest convictability of three items recorded in PROMIS: the recovery of tangible evidence, the securing of witnesses, and the amount of time that elapsed between the offense and the arrest.

The study found that when the arresting officer recovered tangible evidence, the prosecutor was more likely to convict the defendant: the number of convictions per 100 arrests was 60 percent higher for robberies, 25 percent higher for other violent crimes, and 36 percent higher for nonviolent property crimes.[3] Similarly, when the police brought cooperative witnesses to the prosecutor, the probability of conviction was significantly higher for both violent and property crimes. A related finding concerned the relationship of the victim-witness and the arrestee, i.e., whether they were related or otherwise known to one another: the rate at which the prosecutor rejected or dismissed cases because of witness problems, such as failure to appear, was substantially higher for arrests that involved victims and offenders who were not strangers.

A third major finding concerned the length of time between the offense and the arrest: when the police made the arrest soon after the offense--especially in robberies, larcenies, and burglaries--tangible evidence was more often recovered and conviction was more likely. This finding is more complex and more qualified than the other two:

> The conviction rate for robbery arrests--especially the stranger-to-stranger arrests--declines steadily as the delay grows longer. In stranger-to-stranger robbery episodes, 40 percent of all persons arrested within 30 minutes of the offense were convicted; for the suspects apprehended between 30 minutes and 24 hours after the occurrence of the offense, the conviction rate was 32 percent; [and] for arrests that followed the occurrence of the crime by at least 24 hours, the conviction rate was only 23 percent.... To the extent that arrest promptness does increase the conviction rate, it appears to do so largely out of the enhanced ability of the police to recover tangible evidence when the delay is short....
>
> While prompt arrest may sometimes yield more witnesses, the data indicate that more witnesses are especially common in those arrests in which the delay between the offense and the arrest is longer than five minutes.... This is likely to reflect the fact that crimes are usually committed without many witnesses; prompt arrests are primarily a result of the proximity of the police, not the existence of several witnesses. When an offender does commit an offense in the presence of two or more witnesses, he is more likely to be apprehended, but rarely within five minutes. The additional support of witnesses in cases involving longer delay was reflected by our finding that in arrests for violent offenses (including robbery) the prosecutor rejected or dismissed cases due to witness problems at a significantly lower rate when the delay was long....

The study also examined differences in conviction rates among officers and the extent to which those differences were influenced by officer characteristics. Among the 4,505 sworn officers on the MPD force in 1974, 2,418 (54 percent)

made at least one arrest that year. Of those 2,418 officers, 747 (31 percent) did not make a single arrest that led to conviction. Especially striking is the fact that 368 officers--15 percent of the arresting officers--made over half of the arrests in 1974 that led to conviction. And this phenomenon was not the result of a few officers making a large number of arrests leading to convictions for minor offenses: over half of the 2,047 arrests for felony offenses that led to conviction were made by 249 officers.

Looking at the officer characteristics included in the data set (age, sex, years on the force, marital status, and whether the officer was a resident of the District of Columbia), none was a strong predictor of an officer's ability to produce arrests that led to conviction. Only experience on the force was systematically associated with an officer's conviction rate. Those with more experience performed significantly better--in terms of both quantity and quality--than their less-experienced associates.

What Happens After Arrest? raised perhaps as many questions as it answered. Two basic unresolved questions were whether the findings were unique to the jurisdiction studied, Washington, D.C., and whether officers who demonstrate greater skill in making arrests that end in conviction approach their work differently from other officers. The current study was designed to provide information about those issues.

The study has two parts. The first is a multijurisdictional replication of the analysis summarized above. Do a small number of officers make a majority of the

arrests in Los Angeles, New Orleans, and elsewhere, as they do in Washington, D.C.? Is evidence as important to conviction in Manhattan or Cobb County (Georgia) as it is in Washington, D.C.? How important are witnesses in Indianapolis and Salt Lake County? The second part of the study attempts to uncover factors that contribute to high conviction rates. To this end, in-depth interviews were conducted with police officers in Washington, D.C., and Manhattan. From the interviews we sought, first, to compare officers with high conviction rates (HCR) and those with low conviction rates (LCR) in terms of their attitudinal and behavioral responses. To what extent and in what ways are HCR officers different from or similar to LCR officers? Are attitudes, perceptions, and basic knowledge of police practices related to high conviction rates? Second, we sought to explicate any special techniques employed by the HCR officers.

Our hypothesis is that there may very well be differences between officers with high and low conviction rates--differences that could be affected by changes in policy or procedures. Thus, the overall goal of the study is to identify policy changes that could lead to an increase in the quality of arrests made by police officers. Candidate areas include recruitment; orientation; training; assignment; career development; and pre-arrest, arrest, and post-arrest procedures and support services.

II. THE REPLICATION ANALYSIS

The replication analysis was conducted for seven jurisdictions, including Washington, D.C., using 1977-1978 PROMIS data. The seven participating jurisdictions, identified below, provide an interesting mix of large- and medium-size jurisdictions, and they represent each major region of the country. The number of jurisdictions and their diversity are important in terms of lending credibility to the findings that either support or deny the earlier findings from the District of Columbia.

-- Cobb County, Georgia--a small, southeastern jurisdiction--more suburban than rural;

-- Indianapolis, Indiana (Marion County)--a large, midwestern jurisdiction, essentially urban and suburban;

-- Los Angeles County, California--West Coast, urban and suburban, the nation's largest county in terms of population;

-- Manhattan (New York County)--the most densely populated jurisdiction in the country, completely urbanized, eastern;

-- New Orleans, Louisiana (Orleans Parish)--a mostly urbanized, southern city;

-- Salt Lake County, Utah--a county in the Rocky Mountains with urban, suburban and rural sections;

-- Washington, D.C.--the Federal City, a medium-size urban municipality in the mid-Atlantic area and the site of the earlier study.

A. Arrest Disposition Patterns

Table 1 summarizes the disposition of arrests presented to

Table 1

DISPOSITION OF FELONY AND MISDEMEANOR CASES

DISPOSITION	WASHINGTON, D.C., 1974	WASHINGTON, D.C., 1977	COBB COUNTY, GA., 1977	INDIANAPOLIS, IND., 1978	LOS ANGELES, CALIF., 7/77-6/78	MANHATTAN, N.Y., 1978	NEW ORLEANS, LA., 1977	SALT LAKE UT., 1977
Rejected at Screening:	22%	22%	40%	19%	35%	16%	46%	31%
Evidence problems	7	7	9	8	17	6	17	18
Witness problems	6	4	26	3	6	7	12	4
Lacks prosecutive merit	6	8	4	5	6	0 *	1	7
Violation of due process	1	0	1	1	2	0 *	6	1
Plea bargain/immunity	1	n/a	0 *	0 *	0	0 *	n/a	0 *
Diversion	0 *	0 *	1	n/a	0	2	6	0 *
Other or unspecified	1	3	0 *	2	3	n/a	3	1
Referred for Other Prosecution	0% *	0% *	5%	50%	19%	0% *	2%	3%
Accepted at Screening:	78%	77%	55%	31%	46%	84%	52%	66%
Rejected or nolled	31	30	7	7	2	10	6	20
Dismissed by judge	9	7	0 *	0 *	3	3	0 *	5
Rejected by grand jury	1	0 *	1	n/a	7	n/a	0 *	n/a
Acquitted at trial	4	2	0 *	1	1	0 *	3	1
Plea to actual charge	22	30	38 **	16	23	25	30	20
Plea to lesser charge	3	3	0 **	2	4	43	2	15
Guilty by court or jury trial	6	5	1	5	4	0	6	5
Other finding of guilt	0 *	n/a	0 *	n/a	0	n/a	2	n/a
Other/unspecified	1	0 *	6	0 *	2	3	2	0 *
Number of closed arrests (felonies/major misdemeanors)	16,580 F/MM	14,841 F/MM	2,078 F/MM	4,904 F	53,055 F	40,393 F/MM	10,286 F/MM	3,451 F/MM

* Less than .5 percent
** Pleas to actual and lesser charges combined

the prosecutor in each of the jurisdictions during the study period. (PROMIS tracks only arrests presented to the prosecutor.) We define disposition as the formal (and final) action of the court or the court's representative, the prosecutor, regarding a person who was placed under arrest. All arrests made during the study period that reached a formal disposition--even if that disposition was reached between the end of the study period and the time the data were extracted from the data base--are included in the analysis.

In interpreting the arrest disposition information in Table 1, one must be mindful of the context within which a given prosecutor's office must operate. This includes the type of arrests handled (i.e., only felonies, major misdemeanors and all felonies, or all misdemeanors and felonies), whether the police have the power (or assume the power) to pre-screen arrests, and the extent to which the prosecutor is able to refer cases for alternative prosecution or nonadjudicated disposition. This will greatly impinge on the interpretation of final disposition rates. The acceptance rates for Los Angeles and Indianapolis, for example, are roughly half that for Washington, D.C. Many of the arrests not accepted in the first two jurisdictions, however, are not outright rejections, but rather referrals for other prosecution, the ultimate dispositions of which are not recorded in PROMIS.

A number of other factors may also contribute to variations in arrest disposition patterns among the jurisdictions. These include the prosecutor's work load, the court's work load, the availability of correctional facilities, and community standards,

to name a few. Consequently, one should not look at the data presented as providing evidence of the relative efficiency of the various prosecutors' offices. The differences that occur present interesting contrasts, but the data are by no means sufficient to permit interjurisdictional comparisons. They are sufficient for the replication of earlier research, a primary purpose of this study.

Looking at Table 1, considerable variation in case disposition patterns is evident. Of the arrests presented to the prosecutor, for example, from 16 percent to 46 percent were rejected at screening (exclusive of arrests referred for other prosecution). The seven jurisdictions fall roughly into two groups--those that rejected about one-fifth of the arrests presented for prosecution and those that rejected one-third to two-fifths of the arrests presented. Subsequent to acceptance for prosecution, additional attrition occurred. Among the seven jurisdictions, 5 percent to 40 percent of the arrests presented were rejected or dismissed by action of the prosecutor or judge after having been initially accepted for prosecution.

Of those arrests accepted for prosecution, conviction rates (based on pleas and findings of guilty) ranged from 49 percent (Washington, D.C.) to 81 percent (Manhattan). In four of the seven jurisdictions, 70 percent or more of the cases accepted for prosecution ended in conviction. In each jurisdiction, guilty pleas predominated as the means of reaching a conviction.

Particularly striking in Table 1 is the extent to which witness and evidence problems were recorded as reasons for arrests being rejected at screening. In each of the jurisdictions, at

least 50 percent of the arrest rejections were attributed to those two problems, and in three jurisdictions the percentage was 70 or higher. We will see below that those two problems also have a direct bearing on the outcome of arrests that are accepted for prosecution.

B. Factors Related to Arrest Outcome

As used in this study, a "conviction" is a finding or plea of guilty to at least one charge presented to the prosecutor. A non-conviction occurs any time none of the charges in a case ends in a guilty disposition. It has been asserted by some that this measure of performance should not be applied to the police because many aspects of the process--prosecutor, court, and grand jury dismissals, for example--are beyond police control. This argument is not without merit.

Much that the police officer does before and after presenting the arrest to the prosecutor, however, may have a direct bearing on how far a case is processed, as well as on what the final disposition will be. Witnesses vital to the prosecution's case may be obtained and their willingness to continue to support the prosecutor initiated by police action. Without the proper recovery and handling of evidence, certain cases may not be strong enough to convince a grand jury that indictment is warranted. In some cases, the police officer's written report and subsequent testimony about the circumstances surrounding the arrest may itself play a crucial role in determining whether a conviction is obtained.

With these considerations in mind, we begin to answer the question. For those arrests presented to the prosecutor, what factors tend to be related to the probability of conviction? More specifically, what is there that is related to police work or arrest handling that can affect the likelihood of conviction? Additionally, what factors intervene in those relationships, further increasing or decreasing the probability of conviction?

1. Inherent Convictability

The most obvious factor that determines the likelihood of conviction is the nature of the crime itself. Some crimes are inherently more difficult to convict than others. This difficulty is related to what is legally necessary to establish guilt, the prosecutor's view of the offense and the imperative to convict, the community's view of the offense, the defendant's perception of the efficacy of plea bargaining and other alternatives, as well as the judge's perception of the crime, the accused, and justice as a whole.

Much of what we ascribe to the "inherent" convictability of a crime, however, is not so much a part of the crime itself, as it is a part of what the crime typically involves. Offenders involved in such crimes as assault, rape, and auto theft, for example, tend to be harder to convict because they frequently are known or related to their victims. Other crimes, such as homicide, through their social importance and relevance make witnesses more likely to cooperate. Homicide also produces more deliberate and careful handling throughout the criminal justice process, thus increasing the chances for conviction.

Additionally, some crimes involve a combination of factors, which further compounds the difficulty of obtaining a conviction.

The existence of a prior relationship between victim and defendant affects the extent to which such offenses are reported to the police, investigated by the police, and accepted by prosecutors. The data in each jurisdiction show that a prior relationship between the victim and the defendant is consistently related to lower conviction rates. Offenses in which the victim and defendant were "friends or acquaintances," for example, were convicted from 50 to 60 percent as often as offenses in which they were strangers. When a family relationship existed, such offenses were convicted from less than a quarter as often to just under half as often as offenses involving strangers. This finding, which holds across most categories of crime, has been well documented in other studies.[4]

The inherent convictability of the offenses in our data base is reflected in the overall conviction rates in the study jurisdictions. These are shown in Table 2. Inherent convictability may vary even within a crime category--as noted, assaults among relatives are more difficult to convict than stranger-to-stranger assaults. Consequently, care must be taken in interpreting these rates.

2. Factors Within Reach of the Police

In this section, we focus our attention on three factors over which the police have some control: witnesses, recovery

Table 2. INHERENT CONVICTABILITY OF OFFENSES IN DATA BASE

Crime	Cobb County		Indianapolis		Los Angeles		Manhattan		New Orleans		Salt Lake		Washington	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
ROBBERY	38	47%	300	58%	863	68%	1306	52%	824	32%	200	36%	1,572	41%
VIOLENT	242	10%	298	48%	1065	64%	3297	39%	1651	24%	507	3%	2,724	25%
homicide	5	60%	80	68%	192	70%	166	50%	396	23%	79	40%	120	63%
sexual assault	21	29%	81	41%	201	68%	227	37%	188	23%	99	39%	282	29%
aggravated assault	188	5%	87	40%	561	61%	1538	46%	751	19%	214	24%	1,525	24%
simple assault	5	20%	6	0%	0	--	1012	21%	227	47%	79	34%	739	21%
other	23	22%	44	39%	111	65%	354	54%	89	25%	36	39%	58	19%
PROPERTY	739	42%	1208	46%	1835	72%	9332	63%	3753	47%	1397	49%	5,320	37%
larceny	256	32%	393	35%	370	67%	5773	63%	1078	29%	442	44%	2,606	35%
burglary	177	53%	523	58%	964	73%	1795	70%	880	47%	497	55%	1,038	51%
unlawful entry	0	--	11	0%	1	100%	473	50%	5	100%	10	20%	482	17%
auto theft	67	34%	178	41%	310	72%	67	34%	34	41%	200	44%	476	29%
other	239	46%	103	43%	190	78%	1224	60%	1756	57%	248	51%	718	39%
VICTIMLESS	135	61%	478	36%	1621	51%	14034	81%	2709	45%	898	39%	3,111	45%
sex	1	0%	2	0%	31	61%	8452	92%	192	67%	13	31%	1,576	44%
drugs	126	59%	471	36%	1296	59%	3972	56%	2446	44%	829	39%	1,155	46%
gambling	8	100%	5	20%	261	10%	1610	87%	70	21%	18	83%	380	45%
alcohol					33	73%			1	0%	38	23%		
OTHER	122	29%	110	22%	122	29%	110	22%	833	42%	449	26%	2,053	39%
weapons	5	40%	65	14%	100	62%	1034	54%	489	50%	82	38%	821	48%
bail	29	76%	14	64%	2	100%	102	52%	125	46%	185	138%	918	34%
other	88	13%	31	19%	41	71%	1116	56%	219	21%	182	34%	314	31%
ALL	1,276	37%	2,394	44%	5527	64%	30221	68%	9770	41%	3451	40%	14,780	37%

of evidence, and the time that elapses between the offense and the arrest.

a. Witnesses. In discussing the importance of lay witnesses, we include both victims and other lay witnesses. Their cooperation is necessary in reporting the offense, verifying to the police and prosecutor that the offense took place, and demonstrating to the court the defendant's culpability. The police officer is often the witness's first contact with the criminal justice system. The officers' actions will play a significant role in determining whether witnesses will cooperate with the authorities, as well as the amount of satisfaction and confidence they will derive from their involvement with the criminal justice system.

The opportunity for a significant police role in this regard has been demonstrated in the literature. Cannavale, for example, found many instances in which witnesses were questioned in front of the suspect.[5] Consequently, witnesses often gave false names and addresses to prevent the suspect from knowing their identities and where they could be located. Additional problems may exist in that the police do not give other potential witnesses an opportunity to contribute--by leaving the scene too soon or by neglecting to canvass the immediate area for additional witnesses. The greatest opportunity for obtaining information about an offense exists immediately after the offense has occurred--before witnesses have an opportunity to disappear or to forget. Thus, the police pay a vital role in seeing to it that witnesses are located and their cooperation obtained.

The findings of this study are indeed consistent with the notion that witnesses greatly enhance the probability of conviction. The data suggest that the conviction rate increases as the number of witnesses increases. For all offense types, cases having at least two witnesses were significantly more likely to result in conviction than cases having fewer than two witnesses. It would appear that the value of witnesses lies largely in their ability to corroborate the facts about the offense, as supported by other witnesses. The testimony of a single witness is not always enough to convict. Many cases that have only a single witness are deemed insufficient for prosecution and are rejected. One lay witness may cloud the facts, causing doubt in the minds of those evaluating the merits of the case. With two witnesses saying similar things, the element of corroboration is present, enhancing the probability both that the case will be prosecuted and that it will end in conviction.

b. Physical Evidence. The effect of physical evidence on arrest outcome was more difficult to assess in the study because of data problems. PROMIS does provide for an indicator of whether evidence was recovered, but those data were in a usable form for only two jurisdictions. They were available from two others, but in a form so limited as to make their value questionable.

For Cobb County, evidence was indicated as present if the case jacket on file in the District Attorney's office contained reference to evidence recovered by the police at or near the scene of the crime. For Manhattan, evidence was indicated as present if the PROMIS case record showed a property registration number (used for ownership tracking of property recovered by the police).

While we do draw inferences from the existence of an evidence indicator, we should point out that, except in Cobb County, where that information was hand collected, such physical evidence may not have been recovered by the arresting officer(s). Here we are more able to say whether having evidence, regardless of the source, is associated with the likelihood of conviction.

For Cobb County, we found that cases with evidence were more likely to end in conviction than cases without--overall, more than two and one-half times as likely. For Manhattan, in cases involving robbery, violent crimes, and property crimes, physical evidence was associated with higher conviction rates. Also in Manhattan, cases of victimless crimes with evidence were significantly less likely to be convicted, a likely reflection of the tendency for the more convictable victimless crimes, such as prostitution, to more rarely involve evidence than other victimless crimes, such as minor drug offenses (see Table 2).

c. Response Time. A third factor that is at least somewhat within the control of the police is the time that elapses between the offense and the arrest. Our discussion focuses on cases in which there were measured delays of 1 to 5 minutes, 6 to 30 minutes, or between one-half and 24 hours. Cases that take longer than a day for an arrest to occur are likely to be warrant arrests--situations in which the case is investigated, a warrant is obtained, and an arrest is made. In such cases, a longer delay may represent more processing and the existence of a stronger case. Consequently, for purposes of comparison here, we examine only cases in which delay is likely to represent actual delay

rather than an opportunity for other kinds of enhancement--e.g., investigation and the issuance of a warrant.

Response time data were available from Cobb County, Indianapolis, Manhattan, Salt Lake, and Washington, D.C. With the exception of Indianapolis, all of the data show arrests made between 1 and 30 minutes of the offense to be more likely to result in conviction than arrests made later (one-half to 24 hours). Individual and isolated exceptions were discovered but, in general, arrests made within 5 minutes were even more likely to result in conviction than arrests taking longer. In Indianapolis, the conviction rate rose slightly--from 41 percent to 50 percent--if the arrest was made after more than 30 minutes had elapsed.

d. Response Time and Witnesses and Evidence. To understand the high rate of conviction for arrests made within five minutes of the offense, it is useful to analyze relationships between response time and the likelihood of recovering evidence and obtaining witnesses. One would expect that the sooner the officer arrives at the scene, the more likely it is that witnesses will still be available and that evidence useful in establishing the necessary elements of the offense will not have been disturbed. Whether this is empirically the case is examined below.

Data on time and witnesses were available for Cobb County, Indianapolis, Manhattan, Salt Lake, and Washington, D.C. Data on time and evidence were sufficient for our purposes only for Cobb County and Manhattan. In each instance, we looked at the relationship between these factors in the aggregate and across crime categories. That analysis yielded some counterintuitive

findings (discussed below). In general, however, the aggregate and detailed data led consistently to the same conclusions.

In Cobb County and Salt Lake, shorter delays between the offense and arrest time were associated with a higher incidence of multiple witnesses. This tended to support our hypothesis that shorter delays lead to a higher incidence of witness availability. In Manhattan, the aggregate data indicated that longer delays were more likely to produce witnesses. However, that result appears to have been an artifact of aggregation--controlling for crime eliminated the apparent contradiction. In Washington, D.C., a counterintuitive relationship persisted even when controlling for crime. In contrast to Cobb County and Salt Lake, especially for violent and property offenses, longer periods of elapsed time between the offense and the arrest were associated with a greater incidence of multiple witnesses in Washington, D.C. This finding bears out what was found using the 1974 data, as reported in What Happens After Arrest? The results for Indianapolis were mixed; two or more witnesses were significantly more likely after 24 hours had elapsed, but there were no differences among the 1-5 minutes, 6-30 minutes, and 1/2-24 hour intervals.

As before, we speculate that the positive association between time and witnesses is an indication that arrests tend not to be made in the first place when witness support is lacking. Arrests made after a longer period of time may be made in many instances precisely because more than one witness was available.

The available data on evidence and time strongly support the 1974 finding from Washington, D.C. In both Cobb County and

Manhattan, ignoring the "no delay" category, there was a strong relationship between time and evidence--the shorter the delay, the more likely evidence was to be recovered.

In short, we infer that time's influence on the conviction rate exists primarily because a shorter delay increases the probability of evidence recovery. Additional evidence (Salt Lake and Cobb County) would indicate that some of time's effect also exists because it enhances the probability of obtaining witnesses. Because of the strong witness effect in Washington, D.C., however, a time-witness interaction does not necessarily result in the expected findings. Because of the difficulty in establishing cause and effect, we could not test to determine whether some marginal effect of time on witnesses existed. This does not mean, however, that longer delays lead to more witnesses, but rather that, in the event of longer delays, arrests may tend to be made only if witnesses are available.

C. The Police Officer and Arrest Convictability

In the 1974 study of Washington, D.C., arrests, we found that 15 percent of the arresting officers accounted for half of the arrests that resulted in conviction, and that 31 percent of the arresting officers accounted for no convictions at all. In each of the replication sites, we found distributions that were similar, but with varying amounts of concentration at the bottom and top. Table 3 shows the actual and random distributions of both arrests and convictions among the arresting officers.

Table 3
ACTUAL AND RANDOM DISTRIBUTIONS OF
ARRESTS AND CONVICTIONS

Jurisdiction	Fraction With 50% of the Convictions		Fraction With No Convictions	
	Actual	Random*	Actual	Random*
Cobb County	12.3%	22.4%	29.2%	23.3%
Indianapolis	17.0%	21.9%	37.4%	31.6%
Los Angeles	19.1%	23.1%	21.0%	22.0%
Manhattan	7.9%	33.9%	18.2%	0.0%
New Orleans	10.8%	29.3%	23.6%	4.7%
Salt Lake	14.0%	25.3%	25.1%	16.1%
Washington	12.4%	27.6%	26.9%	10.5%

*A Monte Carlo technique was used to distribute randomly the real number of arrests that ended in conviction and those that did not among the actual number of officers who made arrests.

For jurisdictions other than Los Angeles and Indianapolis, the differences between the actual and random distributions were significant at the p=.05 level. We infer from this that some process or phenomenon other than randomness underlies the fact that so few officers account for so many of the arrests that end in conviction.

In an attempt to uncover the processes that explain why the distributions take the forms they do, we considered several hypotheses:

- Particular officers are more adept in obtaining arrests that lead to conviction, due to special skills, training, or the use of special techniques.
- Police departments are structured in such a way that a disproportionate amount of opportunity to make arrests that result in conviction falls heavily on a small but well-defined portion of the department. These officers might be defined by rank (detective, for example), geographical assignment, or by some other structural pattern that determines arrest productivity.
- Particular officers are able to select their arrests so as to maximize their individual conviction rates--i.e.,

choosing to make arrests for crimes that are inherently easier to convict and by choosing not to make arrests for crimes that are not so likely to result in conviction.

- Specific sets of attitudes toward police work are distributed in such a way that some officers are "high achievers" and others are "low achievers."

These four hypotheses summarize possible explanations for the kinds of distributions identified. They relate to skill, opportunity, discretion, and motivation. There are, of course, a variety of combinations of these hypotheses.

For each jurisdiction, we first identified all of the arresting officers and tallied the number of arrests they made, their convictions, and the number of witnesses involved for each arrest. We also produced weighted indicators of the quality of those arrests and convictions and measured the opportunity to make arrests. For each jurisdiction, the basic factors available for analysis were as follows:

-Number of arrests

-Number of convictions

-Weighted number of convictions (sum of maximum sentences for each conviction)

-Weighted number of arrests (sum of maximum sentences for each arrest)

-Inherent convictability (expected conviction rate based on the offense mix of each officer's set of arrests)

-Unit arrest rate (average number of arrests per officer within officer's unit of assignment)

-Average number of lay witnesses per arrest

Additionally, for the Washington, D.C., Metropolitan Police Department, the Indianapolis Police Department, and the Salt Lake Police Department and Sheriff's Office, we were able to

identify the age, sex, department entry date, education, and marital status for each officer.

1. Measurements of Arrest Productivity

This study considers two ways of looking at arrest convictability--conviction rate (the simple conviction rate and a weighted conviction rate) and the weighted and unweighted number of convictions. The simple conviction rate is the number of arrests that end in a conviction on any charge divided by the total number of arrests. The weighted conviction rate, designed to capture the effects of arrest quality on plea bargaining, is the potential number of months of sentence the arrestees could receive based on the top charges at conviction divided by the potential number of months of sentence based on the top charges at arrest.

The conviction rate (weighted and unweighted), however, does not necessarily reflect the opportunity to make arrests, nor does it reflect the success of a given officer's arrests relative to that of other officers with arrests for similar offenses. Two measures were calculated to fill this gap: a unit arrest rate (the average number of arrests per officer within a given unit of assignment) and the inherent convictability of an arrest (the rate at which a particular offense in that jurisdiction is convicted). The unit arrest rate reflects the actual average arrest experience, which allows us to control for the opportunity to make arrests. This measure was available for most jurisdictions. The inherent convictability measure reflects the average convictability of an officer's mix of arrests.

2. Factors Related to Assignment

The unit of assignment indicated in PROMIS was used to test whether particular assignments were likely to yield greater opportunity to make arrests than others. Almost universally, where such an indicator was available, different assignments showed considerably different opportunities for arrest--in terms of both quantity and quality (conviction number and rate). Taken by itself, the unit arrest rate was negatively correlated with conviction rate in New Orleans, Salt Lake, and Indianapolis. It was positively correlated with conviction rate in Manhattan and Washington, D.C. In each of these five cities, the correlation was significant ($p < .05$). In Los Angeles, the correlation was negative but it was not statistically significant. A unit arrest rate was not available for Cobb County, because police units were not indicated in the data.

Controlling for inherent convictability, the unit arrest rate was significant ($p < .05$) in Indianapolis, New Orleans, Salt Lake, and Manhattan. In each of the six jurisdictions except Manhattan, controlling for inherent convictability, the unit arrest rate was negatively correlated with conviction rate. From these varied findings, we infer the following.

First, being in a "high arrest" unit does not guarantee a high conviction rate--in fact, controlling for the arrest mix (through inherent convictability), officers in high arrest units in Indianapolis, Salt Lake, and New Orleans had lower conviction rates. This may be attributable to a work load effect. In New Orleans, where we found a negative correlation

between unit arrest rate and conviction rate, units identified in PROMIS were based on both geographical area and function (e.g., vice squad). Officers with fewer arrests, other things being equal, tended to get higher conviction rates. In Salt Lake, where units are organized primarily around function, the same thing occurred. In these jurisdictions, officers with a narrower range and lower volume of arrest activity may be able to devote more time and attention to each arrest, the result being a higher conviction rate.

This contrasts with Manhattan where, apparently, more active officers seem to have established a method of achieving higher conviction rates. Such may be due to the nature of those highly convictable arrests--consensual sex or gambling--wherein the offender usually pleads guilty. In such cases, arrest handling by an active officer may have an impact on whether the arrestee pleads guilty. Or it may be attributable to experience in processing arrests that comes from making more arrests. In contrast, in the absence of this special group of highly convictable offenses, findings for Indianapolis, Salt Lake, and New Orleans indicate that a lighter work load, rather than the experience gained from a high volume of arrests, is a better index of arrest convictability.

Second, the inherent convictability of the officer's arrest mix is a significant determinant of his or her actual conviction rate. (Only for Cobb County, which had the fewest officers, did we fail to find a significant relationship between conviction rate and inherent convictability. While

statistically insignificant, the correlation was nonetheless positive.) We can conclude that, in general, part of the variation in conviction rate among officers is explained by variation in their mix of arrests--those with more offenses of the sort that more often end up as convictions tend to have significantly higher conviction rates.

An additional way of testing whether variation in conviction rate is explained by the opportunity to make arrests is to test for a correlation between the conviction rate for individual officers and their own number of arrests. In three of the jurisdictions, we found a statistically significant correlation, but it was very small.

3. Factors Related to Officer Characteristics

Using personnel data from four law enforcement agencies (Metropolitan Police Department, Washington, D.C.; Salt Lake Police Department and Sheriff's Office; and Indianapolis Police Department), we were able to examine the relationship between officers' conviction rates and certain personal characteristics--age, sex, education, rank, marital status, and length of service within the particular agency.

The primary method used here was analysis of variance; the unweighted conviction rate was used as the dependent variable. Officers were placed into groups within each of the six independent variables (sex, age, education, experience, rank, and marital status). The analysis of variance was further supplemented by multiple regression analysis. We also looked at the numbers of arrests, convictions, and lay witnesses, as well as the average level of inherent convictability.

In What Happens After Arrest? we found that, while more experienced officers tended to produce more convictions and have higher conviction rates than officers with less time on the force, the other characteristics on which we had data--age, sex, residence, and marital status--were, at best, only mild predictors of an officer's ability to produce arrests that became convictions. The effect of age, for example, was found to be insignificant within given experience groups, but experience within age groups was significant. This led us to the conclusion that the important effect was due to experience.

In the replication analysis, we found that experience appears to mean different things in different jurisdictions. Having the benefit of a cross-jurisdictional data set, we could see that experience does not necessarily coincide with more arrests that lead to conviction. Experienced officers had lower conviction rates in Salt Lake, but higher rates in Washington, D.C. The effect of experience was not consistent, possibly because of different assignment policies from jurisdiction to jurisdiction. Rather, work load (as measured by numbers of arrests), which tended to be heavier for more experienced officers in Salt Lake and relatively lighter in Washington, D.C., tended to be a more consistent predictor of conviction performance. Officers with a heavier work load tend to have a lower proportion of their arrests end in conviction. Work load, which may vary directly or inversely with experience depending on a police agency's assignment policies, was a more consistent indicator.

There does not appear to be substantial evidence for attributing variation in conviction rates to officers' personal or demographic characteristics, such as age, marital status, or education. There does, however, appear to be an effect associated with officers' sex. Female officers in Washington, D.C., tended to make more arrests and produce fewer convictions than male officers. Nothing in the data explained this effect--neither rank, experience, age, arrest mix, nor assignment (to the extent that assignments could be measured). Our interviews with officers, reported later, did not include enough female officers to allow us to draw statistically significant inferences. Consequently, although we may speculate about potential bias against arrests presented by female officers, the available data do not permit us to go any further.

In short, we can go only so far in using personal characteristics to explain variation in officers' conviction rates. Officers' sex and experience do appear to explain part of the difference, but they are hardly useful in the application of specific policies. Our findings also reflect on the extent to which inherent convictability and witness and evidence skills explain variations in arrest quality among officers. However, these only point to the importance of not jumping to conclusions based only on conviction rates. Work load, also, served as an important control variable in attempting to understand this aspect of police officer performance. Work load may provide some useful insights to those responsible for the allocation of manpower.

None of this, however, tells us specifically what it is that officers are doing differently. The aim of this project was to go as far as possible in explaining those differences, and then to identify officers who are different (controlling for what we can explain) and interview them in order to further isolate and identify factors that can significantly explain variation among officers in terms of the quality of their arrests.

In drawing the interview sample, our procedure was to select officers who made arrests during our study period and whose conviction rates were exceptionally low or high. For this purpose we determined that the simple conviction rate was not sufficient. Using only that criterion, our groups of officers with high or low conviction rates likely would have consisted of officers whose arrests were for offenses for which the probability of conviction was also very high or low. To find out whether officers are doing their jobs differently, we had to identify officers whose differences in conviction rates could not be explained merely by arrest mix. Consequently, to be in the high conviction rate group, an officer would have to have made arrests that resulted in conviction more frequently than the same arrests if they had been made by the "typical" officer---i.e., the difference had to be the officer himself and not the fact that the arrests were for offenses that are easily convicted.

A second criterion was that the offenses for which the arrestees were convicted had to be about as serious as the offenses for which they were originally arrested. An officer

who makes arrests for robbery that are reduced to petty larceny, under this criterion, is not seen as productive as an officer whose robbery arrests are not reduced. Charge reduction is taken (though, with reservations indicated elsewhere in the study) as an indication that the officer could have been more thorough in preparing the arrest for presentment to the prosecutor.

With these criteria in mind, we implemented a multistage procedure for statistically selecting officers for the survey. We used a multiple regression model that controlled for the factors mentioned above. Next, we used the coefficients derived from the model to project the expected performance level for each officer. Finally, we compared each officer's predicted performance with his or her actual performance; officers' whose performance was significantly better than predicted were designated HCR--high conviction rate--officers; those who performed below the expected level were designated LCR--low conviction rate--officers. Table 4 compares the performance of HCR and LCR officers in each of the study jurisdictions based on the average number of arrests, lay witnesses, and convictions, as well as conviction rate and the inherent convictability of arrest mix.

III. THE ANALYSIS OF POLICE OFFICER INTERVIEW DATA

The multiple regression model used to select HCR and LCR officers for interview explained a significant amount of the variation among officers in terms of their ability to bring convictable arrests to the prosecutor, both in Washington,

D.C., and in Manhattan. In Washington, D.C., the model explained 72 percent of the variance in total convictions produced by the officers, and in Manhattan it explained 89 percent. Much of the variation was explained by such factors as the inherent convictability of the mix of arrests, the number and seriousness of the arrests, and the fact that many arrests were subject to charge reduction. An important result of this was, as shown in the analysis of the self-administered questionnaire used in the interviews, that few significant differences were found between those identified as high and low conviction rate officers. Consequently, in both interview sites, the ability of the interviews to identify additional factors significantly related to those differences was rather small. (More significant differences were found in Washington, D.C., than in Manhattan, bearing out the prediction of the model.) In the discussion that follows, the reader should bear in mind the small amount of unexplained variation that existed, especially in Manhattan.

A self-administered questionnaire and an interview guide were developed for obtaining information from officers. The questionnaire addressed a number of attitudinal and perceptual variables, grouped into the following seven categories:

- background and demographic characteristics, including career patterns and experience;
- general attitudes toward job and career, including level of satisfaction and perceived improvement or deterioration in job satisfaction;
- perceptions of the organizational context within which the officer operates and processes his or her arrests, e.g., support from the department, the prosecutor's office, the courts, and the community, and the reward system generated by each of those components;

Table 4

AVERAGE VALUES FOR SELECTED ARRREST CONVICTABILITY VARIABLES FOR HCR AND LCR OFFICERS

	LCR	MCR	HCR	ALL
Cobb County				
Arrests	3.32	1.67	7.11	2.47
Convictions	0.55	1.17	6.42	1.50
Conviction rate	0.11	0.71	0.95	0.61
Inherent convictability	0.42	0.39	0.38	0.39
Lay witnesses	1.26	1.92	2.41	1.83
Number of officers	44.	156.	19.	219.
Indianapolis				
Arrests	4.82	2.40	4.77	2.80
Convictions	1.21	0.90	2.89	1.12
Conviction rate	0.36	0.41	0.75	0.44
Inherent convictability	0.58	0.45	0.50	0.46
Lay witnesses	1.23	1.15	1.62	1.20
Number of officers	34.	419.	53.	506
Los Angeles				
Arrests	2.97	2.04	3.28	2.41
Convictions	1.31	1.31	2.67	1.55
Conviction rate	0.34	0.65	0.88	0.63
Inherent convictability	0.44	0.39	0.42	0.40
Lay Witnesses	0.64	0.56	0.62	0.61
Number of officers	368.	1405.	371.	2144.
Manhattan				
Arrests	13.59	7.38	11.31	7.88
Convictions	7.72	5.07	8.33	5.35
Conviction rate	0.39	0.57	0.79	0.57
Inherent convictability	0.64	0.63	0.59	0.63
Lay witnesses	0.50	0.49	0.59	0.50
Number of officers	208.	3464.	163.	3835.
New Orleans				
Arrests	15.03	4.85	16.03	5.92
Convictions	7.00	2.48	11.31	3.06
Conviction rate	0.43	0.50	0.75	0.51
Inherent convictability	0.43	0.42	0.41	0.42
Lay witnesses	0.79	0.93	0.89	0.96
Number of officers	90.	1101.	35.	1226.
Salt Lake				
Arrests	16.54	3.64	11.37	4.93
Convictions	1.27	1.56	6.89	1.95
Conviction rate	.14	.54	.63	.53
Inherent convictability	.48	.43	.39	.43
Lay Witnesses	1.23	1.59	1.85	1.59
Number of officers	26	423	38	487
Washington, D.C.				
Arrests	9.54	5.56	8.78	6.07
Convictions	1.85	2.11	4.69	2.29
Conviction rate	0.17	0.36	0.61	0.37
Inherent convictability	0.41	0.37	0.40	0.37
Lay witnesses	1.45	1.22	1.49	1.26
Number of officers	117.	1530.	141.	1788

- the expansiveness or narrowness of the officer's role concept, most notably, whether the officer believes that making arrests that result in conviction is important;
- attitudes toward arrests;
- perceptions of the value of physical and testimonial evidence; and
- knowledge of routine police procedures.

The questionnaire was highly structured and, in almost all instances, required that respondents give short, readily codable replies.

The interview guide was designed to probe the techniques employed by officers in arrest-related activities. After a wide-ranging review of investigative activities, we selected five for interview topics:

- collecting physical evidence;
- locating witnesses and maintaining witness cooperation;
- interrogating/interviewing suspects;
- working with the prosecution; and
- working with informants.

This instrument consisted mostly of open-ended questions and was designed to be administered by an interviewer to elicit in-depth descriptions of the activities that officers engage in before, during, and after making arrests. The goals of the surveys were deliberately broad. Since the phenomenon under study is relatively unexplored, we adopted an approach with considerable breadth, rather than one that focused sharply on a few issues.

In October 1979 nearly 100 sworn members of Washington, D.C.'s, Metropolitan Police Department were interviewed. In

December 1979, approximately 80 members of the New York City Police Department assigned to units in Manhattan were interviewed.

A. Results of the Self-Administered Questionnaires

Perhaps the most interesting finding that emerged from the self-administered questionnaire, apart from the basic similarity in the responses of HCR and LCR officers, was that HCR officers indicated that they were likely to spend more time locating witnesses than were LCR officers. Although the differences between HCR and LCR officers were not as pronounced among officers from Manhattan as among officers from Washington, D.C., the fact that similar trends were detected suggests that the effort expended in locating witnesses may be a key behavior that differentiates HCR officers from LCR officers. A review of the other findings may help to put this finding into focus.

1. Similarities

. Both groups had similar demographic characteristics, similar backgrounds, and similar kinds of departmental experiences.

. Both HCR and LCR officers received similar types (and numbers) of departmental awards.

. Both groups rated the quality of police officers' work high; they also uniformly rated the quality of work done by the courts as being low.

. Definitions of a successful police officer included the same characteristics--knowledge of job, sensitivity to the community, good attitude or morale.

. In terms of importance when evaluating their own job performance, HCR and LCR officers ranked 16 evaluation factors similarly.

. Both groups said that they perceive the number of arrests that result in conviction to be the least important to their supervisors of 16 criteria that their supervisors might use to rate the performance of individual officers.

. Both groups exhibited similar knowledge of the law and the value of evidence.

. Both HCR and LCR officers said that they make good arrests; both said that they frequently collect evidence.

. Both groups of officers prefer similar types of arrest dispositions, i.e., more convictions, less plea bargaining, and fewer dismissals.

. Finally, both groups said that they were interested in learning the outcome of their arrests, but that no formal procedures for learning outcomes existed.

2. Similarities and Dissimilarities

. In Washington, D.C., both HCR and LCR officers said that they were satisfied with their jobs. In Manhattan, HCR officers were more satisfied than were LCR officers.

. In Manhattan, both HCR and LCR officers rated themselves as "successful." In Washington, D.C., more HCR officers than LCR officers thought they were "very successful."

. In the District of Columbia, LCR officers appeared to be more sensitive of, or oriented toward a concern for, citizens and "the community." In Manhattan, there was no such discernible difference.

. In Washington, D.C., both groups of officers saw positive or negative consequences for making good or poor arrests, respectively. But in Manhattan, LCR officers saw positive consequences (e.g., overtime or a better assignment) for poor arrests and negative consequences (e.g.,"court-related" problems, citizen complaints) for good arrests.

. On the subject of what makes a good arrest, both HCR and LCR officers said that obtaining a conviction, collecting evidence and locating witnesses were the necessary components, although HCR officers in Washington, D.C., said they were more likely to locate witnesses. In Manhattan, only evidence and a conviction were so noted; there was less emphasis on witnesses.

. In the District of Columbia, HCR officers were more likely to agree that most adult felony arrestees are guilty. In Manhattan, there was no difference; both LCR and HCR officers agreed on the likelihood of the arrestee's guilt.

Thus, a variety of issues were raised in the survey, and the responses did not always agree in the two sites surveyed. The overall conclusion to be drawn from this phase of the study is that HCR and LCR officers in both sites were quite similar on the largely attitudinal dimensions that were measured. This should not be too surprising, however, given previous research that indicates that a person's attitudes are often not associated with his or her actual behavior on the job.[7]

3. Importance of Witnesses

Although HCR officers gave responses that were similar to those of the LCR officers for most questions asked, they often

differed when asked about witnesses. In Manhattan, the HCR officers indicated that they put more effort into locating witnesses and then getting them to cooperate, and into being more sensitive to witnesses' welfare generally, than LCR officers. In the District of Columbia, HCR officers were more likely than LCR officers to indicate that they located witnesses half the time or more. The HCR officers from Washington were also less likely than their LCR counterparts to say that "nothing can be done" to locate witnesses, and more likely than the LCR officers to say that the way to obtain witness cooperation is to "be persistent."

B. Results of Personal Interviews

In the analysis of the personal interview data, we sought to identify two dimensions with respect to officer responses: quantity and content. The first dimension, quantity, tests simply whether one group is more or less able than the other to provide responses to the questions presented and whether particular areas of inquiry produce more information than others. The second, content or diversity, seeks to measure the range of information that is provided by the respective groups of officers. This dimension involves the question of how diverse the tools or methods are upon which the officers draw. It looks at the specific types of responses offered by the officers in order to determine which solutions are provided by the different groups. Through the second dimension, also, we sought to determine what "special techniques" officers could identify and (by looking at who said what) to assess whether

such techniques were likely to contribute to or detract from high achievement with respect to conviction rates.

We found only sporadic evidence of strong or systematic differences between HCR and LCR officers from the analysis of the open-ended interview data. This is not too surprising in view of at least three important considerations:

(1) Some officers identified as HCR or LCR officers may have been so identified due largely to circumstances beyond their control during the sample period. A longer sample period would lessen such "luck-of-the-draw" instances.

(2) Some of the officers interviewed may in fact behave quite differently from the way they reported in the interview. Some may not even be aware of these differences.

(3) Factors that separate HCR and LCR officers may not be identifiable in an interview. The model used to draw the sample left little variation to be explained by other factors to begin with. Among the factors that remain may be such difficult-to-identify characteristics as common sense, instinct, ability to reason quickly under duress, and ability to communicate with a variety of people.

In view of these considerations, it is remarkable that we found as many differences as we did; a number of the differences were consistent across the two sites. So as not to overlook the possibility of something that might emerge as significant in an alternative context, we summarize not only the statistically significant differences, but other tendencies as well.

In regard to obtaining evidence to support an arrest, the LCR officers sampled in Washington, D.C., were more likely to say that it was important to preserve the crime scene. The HCR officers (also in Washington) were more likely to say that it was important to search the surrounding area, locate and

question witnesses, and locate and question the victim. In Manhattan, HCR officers were more likely to stress the importance of investigative and follow-up activities. Perhaps even appearing trite in that its language has been popularized by the media, "preserving the scene" may not be as important as leaving the scene in pursuit of witnesses and, more generally, important clues to establish, beyond a reasonable doubt, who committed the crime. In the responses given us, there appeared to be an almost mechanical adherence to this exact phrase, "preserving the scene." If we can infer anything from the fact that this response was given less frequently by the more "successful" officers, then perhaps we can infer that a case is enhanced by paying attention more to the total context of an offense than to its specifics. This idea is supported by the finding that, in looking for evidence that proves the suspect was at the scene of the crime, LCR officers were much more likely to say that they look for specific things--such as hairs, fibers, and debris.

In the context of the quantity of responses about evidence, HCR officers in Washington and in Manhattan were able to list more procedures and techniques for obtaining evidence that proves a crime was committed. The HCR officers listed slightly more techniques and procedures for obtaining evidence that proves that the victim was at the scene (or that the suspect and the victim came in contact) than their LCR colleagues. For the remaining type of evidence, the type that proves that the suspect was at the scene, there was no difference between the responses of the two groups.

The HCR officers were not only more knowledgeable about evidence gathering, they were also familiar with attendant problems. They tended more often to indicate circumstances in which it was difficult to collect evidence proving a crime was committed.

In a number of instances, officers drew a blank in responding to specific problems. For example, in regard to methods of locating witnesses, we found that LCR officers in Washington were significantly more likely than the HCR officers to say that "nothing could be done." This is supported by a general tendency for LCR officers to provide more answers of "nothing" than HCR officers. It may be that, having solved few such problems, the LCR officers more often draw a blank. This hypothesis, however, could not be fully addressed.

In regard to dealing with suspects, we found that both HCR and LCR officers mentioned the use of "psychology" and direct questions in getting information. However, we found that more HCR officers cited the use of direct questions than did LCR officers, and that while HCR officers said that they use psychology more than they do a direct questioning techniques, more LCR officers cited the use of psychology than did HCR officers. Additionally, LCR officers were more likely to suggest "confronting the suspect with the evidence" as a useful approach for interrogation. This is supported somewhat by the statistically significant finding in Washington that HCR officers more frequently cite "getting the details of the crime" as an interrogation goal. There was also a tendency for HCR officers to cite maintaining the "legality of the process"

as a goal more often than LCR officers. Perhaps the more "down-to-business" replies of the HCR officers indicate greater professionalism. Whether this attribute contributes to their greater success at making arrests that lead to conviction, however, can be inferred only tenuously.

Paralleling this tenuous inference, we detected a tendency for the HCR and LCR officers to identify different aspects of a police-prosecutor working relationship as being important to success. The LCR officers, similar to their tendency to develop a rapport with suspects, tended to stress reaching a "mutual understanding" with the prosecutor. In contrast, HCR officers were relatively more likely to cite professional competency as a desirable aspect. Again, the "down-to-business" tone, the emphasis on professionalism, seems to emerge.

A final section of the questionnaire was analyzed in a subjective manner in an effort to uncover other differences between HCR and LCR officers. These evaluations revealed that HCR officers were more consistently likely to say that they were more persistent than other officers and that they follow through on arrests they make.

Not so frequently, but still worth mentioning, some HCR officers said that they have a special way of obtaining the cooperation of reluctant witnesses--obtaining additional witnesses to bolster the reluctant witness or bringing several reluctant witnesses together to generate mutual support.

Finally, in Manhattan, HCR officers were rated as exerting more effort than LCR officers in locating and obtaining

witnesses and in interrogating suspects. They also appeared more sensitive to the welfare of witnesses than LCR officers.

IV. CONCLUSIONS AND IMPLICATIONS

Because of the central importance of arrests to the control of crime, it is essential that when an arrest is made, it be made well.

Arrest quality, as measured by acceptance for prosecution and overall conviction rate, varies widely. In the study jurisdictions, acceptance for prosecution ranged from a low of 31 percent of all arrests presented to a high of 84 percent; and the overall conviction rate (arrests divided by convictions) ranged from a low of 23 percent to a high of 68 percent. This suggests that a great deal can be done to increase the quality of arrests presented to the prosecutor.

Earlier research has pointed the way in terms of findings about the importance of witnesses, evidence, and response time--factors that can enhance arrest quality. And the current study confirms those findings.

The witness finding was validated in Cobb County, Indianapolis, Los Angeles and, for the most part, in Manhattan. The value of two or more witnesses was confirmed in the three jurisdictions; in Manhattan, having at least one witness was significantly better for serious crimes than having no witnesses at all.

The evidence finding was validated in Cobb County and in Manhattan, where higher conviction rates for robbery, violent crimes, and property offenses were associated with having evidence.

In Cobb County, Manhattan, Salt Lake County, and Washington, D.C., arrests made between one and 30 minutes after a crime was committed were more likely to result in conviction than arrests made later (1/2 to 24 hours). In general, arrests made within 5 minutes of the offense were more likely to result in conviction than arrests taking longer.

The current study also confirms the fact that a small number of officers make a majority of arrests that end in conviction. In Manhattan, 7.9 percent of all officers making arrests made 50 percent of the arrests that ended in conviction; and in Los Angeles 19.1 percent of the officers made half of the arrests that ended in conviction. For the seven jurisdictions combined, 12 percent of the 10,205 officers who made arrests in 1977-78 accounted for more than half of all the convictions, while 22 percent produced not a single arrest that ended in conviction.

The current study also confirms earlier findings that personal and demographic characteristics, including age, sex, education, rank, marital status, and length of service within the particular agency, are not systematic predictors of an officer's ability to produce arrests that result in a conviction. As noted above, the earlier study found that more experienced officers tended to produce more convictions and higher conviction rates than officers with less time on the force. But, when that finding was subjected to a cross-jurisdictional analysis, there was no substantial

evidence for attributing variation in officer performance to personal or demographic characteristics.

The policy implications from the replication part of the study are clear: Make sure that the officers responding to crime calls are fully aware of the importance of recovering tangible evidence and enlisting the cooperation of persons who have witnessed or know about the crime. And, if possible, avoid delay in arriving at the scene of the crime or the location of known offenders in the crime.

Depending upon how the department is organized, i.e., whether uniformed officers conduct the preliminary investigation and follow-up investigation or are required to refer the arrest or investigation to a detective or investigator--the police role after the arrest might be expanded. In What Happens After Arrest?, we alluded to an "expanded police perspective." The replication analysis confirms the need for a revised police role that follows the arrest more closely through prosecution and adjudication. The police can play a more supportive role in the prosecution of persons they arrest and prepare themselves to testify in hearings and at trial. These are important ingredients of a broader police response to serious crime.

Through self-administered questionnaires and in-person interviews with officers in Manhattan and Washington, D.C., we attempted to obtain insights into the differences between officers who consistently make convictable arrests and those who do not. The HCR officers indicated that they tended to

focus greater attention on locating and dealing with witnesses than did LCR officers. The HCR officers were also somewhat more willing than LCR officers to use both a direct, factual line of questioning and a psychological, indirect approach; LCR officers tended to rely more heavily on the latter approach. The HCR officers expressed more interest in follow-up investigation than did LCR officers, and in the District of Columbia they tended to agree more strongly than LCR officers with the statement that most adults arrested for felony offenses are guilty of the offense.

We also examined the responses given by officers with high conviction rates to explore whether those officers use special techniques that might contribute to their ability to make consistently convictable arrests. Although we cannot be certain that any particular technique was really related to an officer's high conviction rate, some potentially useful methods were nonetheless revealed. Several HCR officers reported success in improving the cooperativeness of an existing witness by locating additional witnesses in order to create an atmosphere of mutual support. Several also emphasized the importance of persistence or "follow-through" in various aspects of post-arrest activity--collecting and processing physical evidence, locating and maintaining contact with witnesses, and obtaining any evidence that proves that the defendant committed the offense.

Some especially revealing survey results had to do not with differences between HCR and LCR officers, but with areas of

agreement. Both groups of officers perceived limitations in the means to make arrests that hold up in court, and few incentives to do so, as well. Both groups of officers expressed difficulty in obtaining information about the outcome of a case in court; the vast majority in both New York and Washington indicated that they were aware of no formal procedure for acquiring such information. Both groups of officers had received approximately the same level of official recognition for good performance in the form of commendations and awards. And both groups indicated that their supervisors rate individual officers predominantly on criteria other than how the officer's arrests are disposed in court.

Analysis of the self-administered questionnaire, viewed in the context of a police officer's career, yields a mixed set of recommendations. The lack of clear-cut differences in the demographic and attitudinal portions of the interviews virtually rules out policy recommendations in several important areas: police officer recruitment, screening, selection, and appointment. Our overall conclusion was that HCR and LCR officers were quite similar on the dimensions that were measured. Moreover, the "down-to-business" tone and emphasis on professionalism found in the structured interviews provides little guidance for a police department's personnel efforts from recruitment through appointment.

On the other hand, regarding the next sequence of events in a police officer's career, there are policy recommendations. These events include orientation, training, and assignment.

Orientation and training should emphasize doing more than "preserving the scene." In addition to apprehension of the offender, emphasis should be placed on crime scene management that would include initiating an immediate canvass for witnesses and for evidence. The value of a cooperative witness and tangible evidence was shown in the earlier study in Washington, D.C., and was proven beyond a doubt in several other jurisdictions. The potential value of rapid response has also been shown. In this regard there is a need for police trainers to review what is being taught crime scene management, locating and maintaining the cooperation of witnesses (including the victim), recovering tangible evidence, and rapid response. All of these factors are important to the concept of arrest quality.

With regard to assignment, considerations other than arrest convictability will probably continue to drive these decisions. Few police agencies would have the manpower available to make assignments on the basis of officers' conviction rates; arrests constitute a small part of the total police effort. And yet, the arrest is an important response to the problem of serious crime in society. Officers with high conviction rates might be given assignments that involve the most serious crime problems.

Personnel evaluation, promotion, and career development are other dimensions of an officer's career. Before it is possible to evaluate an officer's performance in terms of arrests that lead to conviction, it is obviously necessary to have systems

or procedures in place to record arrest outcomes in terms of arresting officers or arresting officer teams. When the systems or procedures are in place, HCR officers and teams can then be differentiated from those with low rates of arrest convictability. This is not to suggest that arrest convictability should be the only evaluation factor considered, but it should certainly be taken into account--in perspective within the total police mission.

In view of the absence of such systems, it is remarkable that the police are able to make the difference that they do, in terms of what happens after arrest. We found many officers in this study who make convictable arrests consistently, despite limited means for obtaining feedback about what happens after the arrest, despite limited incentives for making an arrest that will be easier for the prosecutor to work with, despite the perception that their supervisors do not care about what happens to the arrests made by the officers, and despite the fact that the officers typically have primary responsibilities that lie elsewhere--provision of public services, maintenance of public order, traffic control and safety, crowd control, community relations, provision of public information, internal administration, and so on.

It remains to determine how to bring about conditions that will improve the quality of the more than two million arrests for serious crimes made annually in the United States. Clearly, this task begins with the intention to improve arrest quality and with the availability of needed information. Police

officers will make better arrests when the incentive to do so is greater.

One potentially useful way for the police to improve the quality of their arrests is for every police officer--from the commissioner or chief to the patrolman--to be more aggressive in requesting feedback from the prosecutor about the court outcomes of cases brought earlier. The officer can ask: How did my arrests turn out? Was the evidence adequate? Were the witnesses cooperative? Were there any technical problems in the way that evidence was obtained? Did I provide sufficient post-arrest support in terms of follow-up investigation, witness contact, appearances in court, testimony, and so on? Should I do things differently next time?

Individual officer's incentives are likely to improve when the commissioner or chief asks: How is my department doing as a whole, as compared with previous periods and other departments? Which units within the department need the most help in improving the quality of their arrests? Which officers need the most help? Which officers are the most successful, and what can we learn from them to pass on to others in the department? Where do specific problem areas exist, in terms of obtaining and processing physical evidence, obtaining and maintaining witness support, and working with the prosecutor after arrest? Can the district attorney help me in interpreting the available information about what is happening after arrest? Can he help me by providing more information? Different information? What kind of information do I need most?

Another area for policy emphasis or change concerns the need for written arrest and prosecution standards in each jurisdiction. When arrests are made they should be made on the basis of a specific set of criteria. These criteria might exceed the usual police standard that is expressed as "probable cause" and will more often approach the prosecutor's standard of "guilty beyond a reasonable doubt."

Arrest quality is, of course, not the only issue that police departments have to concern themselves with. By the same token, improving the quality of arrests is a long neglected area of police responsibility that need not come at the expense of other important spheres of police responsibility. Improvement in this area can even enhance the ability of the police to meet those other responsibilities. For example, by improving the quality of arrests, the police should be able to slow down the "revolving door" that enables many offenders to continue to plague the community and that undermines respect for the entire justice system.

The police offer the first official line of defense against criminal activity. When an arrest is the appropriate police response--and, as noted above, in many instances it is not--the police need no longer make the arrest thinking that how it is made does not much matter. There can be no doubt that the police do make a difference--they determine largely what happens after arrest.

NOTES

1. See American Bar Foundation, The Urban Police Function (New York: 1973); and Patrick V. Murphy, "Police Accountability," in Readings on Productivity in Policing, ed. J.L. Wolfe and J.F. Heaphy (Washington, D.C.: Police Foundation, 1975).

2. Peter W. Greenwood, An Analysis of the Apprehension Activities of the New York City Police Department, R-529-NYC (New York: Rand Corporation, 1970).

3. Brian Forst, Judith Lucianovic, and Sarah J. Cox, What Happens After Arrest?, PROMIS Research Publication no. 4 (INSLAW, 1977):42.

4. See ibid; also Felony Arrests: Their Prosecution and Disposition in New York City's Courts (New York: Vera Institute of Justice, 1977); and Kristen M. Williams, The Role of the Victim in the Prosecution of Felony Cases, PROMIS Research Publication no. 12 (INSLAW, 1978).

5. Frank J. Cannavale, Jr., and William D. Falcon (ed.), Witness Cooperation, INSLAW (Lexington, Mass.: Lexington Books, 1976).

6. Analysis of variance is a statistical technique for estimating relationships between variables.

7. A. H. Brayfield and W. H. Crockett, "Employee Attitudes and Employee Performance," Psychological Bulletin, 52 (1955): 396-424; F. Herzberg, et al., Job Attitudes; Review of Research and Opinion (Psychological Service of Pittsburgh, 1957); R. A. Katzell, "Personal Values, Job Satisfaction, and Job Behavior," in H. Borow, ed., Man in a World at Work (Boston: Houghton-Mifflin, 1964); R. A. Katzell and D. Yankelovich, Work, Productivity, and Job Satisfaction: An Evaluation of Policy-Related Research (New York: The Psychological Corporation, 1975).

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